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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/355,991	08/24/1999	YUJI YAMAMOTO	P806-9022	7196

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EXAMINER	
AN, SHAWN S	

ART UNIT	PAPER NUMBER
2613	19

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/355,991	YAMAMOTO ET AL.	
	Examiner	Art Unit	
	Shawn S An	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 May 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14,20,21 and 23-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *13,14,20 and 21* is/are allowed.

6)☒ Claim(s) *1-12 and 23-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. *19* .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Request for Continued Examination

1. The request filed on 5/27/04 for a Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 09/355,991 is acceptable and a RCE has been established. An action on the RCE follows.

Response to Amendment

2. As per Applicants' instructions in Paper 18 as filed on 5/27/04, claims 1-5, 7-8, 11-14, 20-21, and 23-25 have been amended.

Response to Remarks

3. Applicant's arguments with respect to amended claims have been carefully considered but are moot in view of the same ground(s) of rejection incorporating the previously cited prior art references with added support and interpretations.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-4 and 6-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Lipton et al (5,193,000).

Regarding claims 1 and 2, Lipton et al discloses a digital broadcast receiver, comprising:

receiving means for demodulating and decompressing received video data and outputting pixel data (Fig. 10, 7); and

determining means for detecting characteristic of the video data, and determining whether the video data is video data in accordance with a stereoscopic broadcasting method (col. 5, lines 49-51).

Furthermore, Based on Lipton et al's teachings as above, the display would ***inherently*** (emphasized) has to detect some characteristic of the video data received by the receiving means so as to determine whether the video data is video data in accordance with either a stereoscopic broadcasting method or non-stereoscopic broadcasting method in response to the result of the detection.

Regarding claim 3, Lipton et al discloses video data is first video data in accordance with the stereoscopic broadcasting method and the determining means determines whether the received video data is the first video data (stereoscopic)or second video data (non-stereoscopic) (col. 5, lines 49-51);.

Regarding claim 4, Lipton et al discloses the first video data constituting the arrangement by a first block (Fig. 8, 802) including pixel data for the right eye, and a second block (803) including pixel data for the left eye. Furthermore, a video frame inherently comprises pixel data arranged in a matrix in horizontal and vertical directions.

Regarding claim 6, Lipton et al teaches reproducing and displaying with non-interlace scanning method (col. 10, lines 2-5).

Regarding claims 7 and 8, Lipton et al discloses a display apparatus, comprising:

separation means (Fig. 11, 21) for separating and outputting a synchronous signal from a received video signal.

determining means for determining video signal is in accordance with a stereoscopic broadcasting method (col. 5, lines 49-51); and

reproducing and display means (Fig. 2) for displaying to the user based on the result of determination by the determination means for displaying first video signal (stereoscopic) or second video signal (non-stereoscopic) on the monitor.

Regarding claim 9, Lipton et al discloses an image plane for a right eye video signal obtained by interlace scanning method and an image plane for a left eye video signal obtained by interlace scanning method (col. 10, lines 63-68 and col. 11, lines 1-14).

Lipton et al discloses reproducing and displaying with non-interlace scanning method (col. 10, lines 2-5).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 10 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lipton et al (5,193,000).

Regarding claims 23-25, Lipton et al discloses a video data recording apparatus, comprising:

video processing means (Fig. 1C) for forming video data of one channel by arranging an uncompressed image corresponding to a first video signal (Camera A) and an uncompressed image corresponding to a second video signal (Camera B) different from each other, divided into left horizontal (202) and right horizontal (203) portions on one image plane (Fig. 9B)

(col. 8, lines 10-28);

multiplexing means (Fig. 1C, 124) for multiplexing the video data;

compressing means (Fig. 1C, 122-123) for compressing video data output from the video signal processing means;

recording means (Fig. 1C, RECORDER) for recording the compressed video data on a recording medium.

Lipton et al also discloses a video data reproducing apparatus, comprising:

reproducing means (Fig. 3, 302) for reproducing the compressed video data from the recording medium;

decompressing means (Fig. 10, 7) for decompressing the reproduced compressed video data;

demultiplexing (output signal formatting) means (Fig. 5, 502; Fig. 10, 10) for receiving the decompressed video data for demultiplexing the first video signal (503) and the second video signal (504).

Lipton et al further discloses a video data recording and reproducing apparatus, comprising:

compressing means (Fig. 1C, 122-123) for compressing video data;

recording means (Fig. 1C, RECORDER) for recording the compressed video data on a recording medium;

reproducing means (Fig. 3, 302) for reproducing the compressed video data from the recording medium;

decompressing means (Fig. 10, 7) for decompressing the reproduced compressed video data; and

demultiplexing (output signal formatting) means (Fig. 5, 502; Fig. 10, 10) for receiving the decompressed video data for demultiplexing the first video signal (503) and the second video signal (504).

Even though Lipton et al's formation divides into left horizontal (202) and right horizontal (203) portions on one image plane, Lipton et al further teaches on

Fig. 8 (Prior Art), an alternative arrangement of dividing into upper (802) and lower (803) portions on one image plane (801).

Furthermore, the Examiner realizes that the Applicants' invention compresses the multiplexed video data, whereas Lipton et al discloses compressing the video data, then multiplexing the compressed video data.

Therefore, it would have been considered quite obvious to one of skill in the art to reverse the functions of compressing the video data, then multiplexing the compressed video data, thereby compressing the multiplexed video data so as to prevent using more than one compressors, thereby saving costs associated with the hardware.

Moreover, it would have been considered quite obvious to a person of ordinary skill in the relevant art employing a digital broadcast receiver as taught by Lipton et al to incorporate the well known prior art (Fig. 8) of stereoscopic TV system as also taught by the Lipton et al as an alternative arrangement ***(stereoscopic horizontal display or stereoscopic vertical display)*** to display the stereoscopic video signals.

Regarding claim 10, Lipton et al discloses vertical (V) sync signal (Fig. 11, H,V). Since first video signal (stereoscopic) and second video signal (non-stereoscopic) have inherently different formats, it is considered a quite obvious feature for the first video signal (stereoscopic) and the second video signal (non-stereoscopic) to have mutually different frequencies.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lipton et al as applied to claim 2 above, and further in view of Tahara (5,633,682).

Regarding claim 5, Lipton et al discloses storing means (Fig. 10, 8) for receiving and storing the pixel data of a specific area of the first block, and second block corresponding to specific area of the first block.

Lipton et al does not particularly disclose processing means for comparing the pixel data of specific area of the first block with the pixel data of specific area

of the second block for determining and outputting whether received video data is the first or the second video data.

However, Tahara teaches processing means (Fig. 6, 33) for comparing (color difference) the pixel data of specific area of the first block with the pixel data of specific area of the second block.

Therefore, it would have been considered quite obvious to a person of ordinary skill in the relevant art employing a digital broadcast receiver as taught by Lipton et al to incorporate the processing means as taught by Tahara for comparing the pixel data of specific area of the first block with the pixel data of specific area of the second block so as to determine and output whether the Lipton et al's received video data is the first or the second video data.

9. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lipton et al as applied to claims 9 and 10 above, respectively, and further in view of Kondo et al (6,304,243 B1).

Regarding claims 11 and 12, Lipton et al disclose the conventionally well known reference clock generating means (Fig. 10, 7, CLOCK);

count means (Fig. 11, 25) for counting;

latch means (Fig. 14, 51-52) for latching the count value;

control signal generating means (Fig. 10, 9) for generating control signal to cause the latch means to latch the count value, and cause the counter to reset the count.

Lipton et al does not seem to disclose processing means obtaining the count value from the latch means and comparing the count value from the latch means for determining whether video signal is stereoscopic or non-stereoscopic, and when the count value is not received then determine that the sync signal is different from the first and second broadcasting methods.

However, Kondo et al teaches the conventionally well known reference clock generating means (Fig. 5, CK), count means (1401), latch means (1394), control signal generating means (Fig. 2, 4), and processing means (6 and 8).

Therefore, it would have been considered quite obvious to a person of ordinary skill in the relevant art employing a broadcast receiver as taught by Lipton et al to incorporate processing means as taught by Kondo et al so that the processing means obtains the count value from the latch means and compare the count value from the latch means so as to determining whether the Lipton et al's video signal is stereoscopic or non-stereoscopic, and when the count value is not received then determine that the sync signal is different from the first and second broadcasting methods for effectively displaying different modes such as stereoscopic, non-stereoscopic, auto-stereoscopic display, etc.

Allowable Subject Matter

10. Claims 13-14 and 20-21 are allowed as having incorporated the allowable subject matter as discussed in the last Official action as Paper 7.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawn An whose telephone number (703) 305-0099 and schedule are Tuesday-Friday.

12. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

SHAWN S. AN
PATENT EXAMINER

SSA
Primary Patent Examiner
6/25/04